

Anti-RALB Picoband Antibody

Catalog # ABO12481

Product Information

Application	WB
Primary Accession	P11234
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Ras-related protein Ral-B(RALB) detection. Tested with WB in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	5899
Other Names	Ras-related protein Ral-B, RALB
Calculated MW	23409
Application Details	Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat
Subcellular Localization	Cell membrane ; Lipid-anchor ; Cytoplasmic side . During late cytokinesis localizes at the midbody.
Source	Eukaryota
Protein Name	Ras-related protein Ral-B
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human RALB (166-203aa DKVFFDLMREIRTKKMSSENKDKNGKKSSKNKKSFKERC), different from the related mouse sequence by three amino acids, and from the related rat sequence by four amino acids.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins.
Storage	At -20 °C for one year. After reconstitution, at 4 °C for one month. It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.

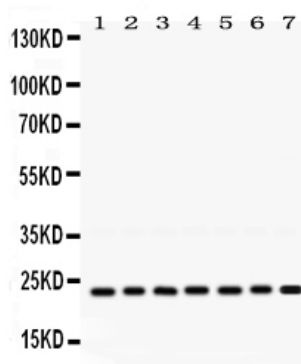
Protein Information

Name	RALB
Function	Multifunctional GTPase involved in a variety of cellular processes including gene expression, cell migration, cell proliferation, oncogenic transformation and membrane trafficking (PubMed: 10393179 , PubMed: 17875936 , PubMed: 18756269). Accomplishes its multiple functions by interacting with distinct downstream effectors. Acts as a GTP sensor for GTP-dependent exocytosis of dense core vesicles (By similarity). Required both to stabilize the assembly of the exocyst complex and to localize functional exocyst complexes to the leading edge of migrating cells (By similarity). Required for suppression of apoptosis (PubMed: 17875936). In late stages of cytokinesis, upon completion of the bridge formation between dividing cells, mediates exocyst recruitment to the midbody to drive abscission (PubMed: 18756269). Involved in ligand-dependent receptor mediated endocytosis of the EGF and insulin receptors (PubMed: 10393179).
Cellular Location	Cell membrane; Lipid-anchor; Cytoplasmic side. Midbody Note=During late cytokinesis, enriched at the midbody

Background

Ras-related protein Ral-B (RalB) is a protein that in humans is encoded by the RALB gene on chromosome 2. This protein is one of two isoforms of the Ral protein, the other being RalA, and part of the Ras GTPase family. As a Ras GTPase, RalB functions as a molecular switch that becomes active when bound to GTP and inactive when bound to GDP. RalB can be activated by RalGEFs and, in turn, activate effectors in signal transduction pathways leading to biological outcomes. Additionally, Ral proteins have been associated with the progression of several cancers, including bladder cancer and prostate cancer. While the above functions appear to be shared between the two Ral isoforms, their differential subcellular localizations result in their differing involvement in certain biological processes. In particular, RalB is more involved in apoptosis and cell motility. Moreover, RalB specifically interacts with Exo84 to assemble the beclin-1 π -VPS34 autophagy initiation complex, and with Sec5 to activate the innate immune response via the Tank-binding kinase 1 (TBK1).

Images



Anti- RALB Picoband antibody, ABO12481, Western blotting
All lanes: Anti RALB (ABO12481) at 0.5ug/ml
Lane 1: Rat Brain Tissue Lysate at 50ug
Lane 2: Rat Thymus Tissue Lysate at 50ug
Lane 3: Rat Lung Tissue Lysate at 50ug
Lane 4: Mouse Spleen Tissue Lysate at 50ug
Lane 5: Mouse Liver Tissue Lysate at 50ug
Lane 6: HELA Whole Cell Lysate at 40ug
Lane 7: 22RV1 Whole Cell Lysate at 40ug
Predicted bind size: 23KD
Observed bind size: 23KD

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.